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Orders for Sustainability Reports – A New Phenomenon in Manufacturing Companies in the Metal and Automotive Industries

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Abstract:

Purpose: *One of the current challenges for most companies operating in Poland, for instance in metal and automotive industries, is to adapt to the principles of sustainable development. Creating a harmonious combination of economic growth with social and environmental aspects forces companies to increase – among others – the efficiency and effectiveness of production processes, optimise the use of resources and rationalise the operating costs of the company. These and other conditions, which also align with Industry 4.0 and 5.0, make it necessary for companies to monitor, assess and report the effects of their activities, while at the same time point towards a high degree of sustainability. In practical terms, this may mean a more frequent occurrence of greenwashing, leading to the emergence of the so-called "Orders for Sustainability Reports" – a new concept, defined by the authors of the article. In the light of the considerations stated above, this article aims to interpret and identify the phenomenon of " Orders for Sustainability Reports" based on the example of selected economic operators of the metal and automotive industry in Poland.*

Design/Methodology/Approach: *To achieve the objective of this study, a survey was designed and conducted among 46 mid- and senior managers involved in implementing sustainable development strategies, reporting on sustainable development and CSR (Corporate Social Responsibility) in selected industries. The companies they represented due to their technology and/or processes may be classified as Industry 4.0 and 5.0. The research employed the direct interview method and in-depth interview.*

Findings: *The results of the research show that companies adapt their business strategies to the objectives and requirements of sustainable development. They are strongly focused on a positive presentation of their results, which in turn play a key role in establishing a competitive market advantage. It is therefore plausible to establish the existence of a phenomenon called a "Orders for Sustainability Reports" which, however, is appropriate among companies and may stem from the ignorance and the lack of inexperience of companies in reporting sustainable development.*

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Practical implications: *The research results provide a valuable source of information for management staff of companies required to produce ESG reports. Given that the requirement to prepare these reports is a relatively new task for Polish companies, any information on this topic is crucial.*
Originality/Value: *The study is an attempt to fill a gap in the literature on understanding and identifying the creation of reports for specific needs, in this case for sustainable development. It points to the risk of superficial intentions on the part of companies in the industry in question in their pursuit of sustainable development. The conclusions drawn from the study inspired the authors of the article to attempt, as part of further research, to capture the significance of the observed phenomenon for the business environment. In summary, 'Orders for sustainability reports' is a new concept in the literature that has not been used in it before.*

Keywords: *Sustainability reporting, corporate social responsibility (CSR), manufacturing industry, metal and automotive sectors, environmental disclosure.*

JEL codes: *M14, Q56, L62, L61, M41.*

Paper type: *Research article.*

1. Introduction

In recent years, sustainable development has become a major target for entrepreneurs who aim to reduce the negative impact of their production processes on the environment through the implementation and development of modern technologies (e.g. artificial intelligence (AI), in compliance with concepts of Industry 4.0 and 5.0 as well as ecological manufacturing methods. The concept of sustainable development, recognised internationally, is to ensure prosperity for current and future generations (UN, 2024).

It can therefore be concluded that sustainable development is a holistic approach, a transition from a GDP-based model to a model focusing on the well-being of humanity and the planet, while considering the interaction between the economic, social and environmental pillars. The implementation of this concept poses challenges for manufacturing companies in measuring their environmental, social and economic impacts.

It is therefore crucial to properly define and interpret the individual sustainability indicators which help to monitor, evaluate and report the effects of actions undertaken by companies and institutions in the area of sustainable development. This is an extremely difficult and time-consuming task, which is why the companies often choose to study their degree of sustainability, specialized external companies.

This, in turn, entails high costs which these companies must include in the budgeting process of costs and revenues. On the one hand, the prominence of the information disclosed in ESG reports is extensive enough that there is a risk that these entities will present their level of sustainability more positively than it actually is. This is manifested, among other things, in the conclusion of international contracts or the acquisition of additional sources of business financing.

On the other hand, drawing up an objective opinion on the environmental impact of the company's processes, society and the economy is extremely difficult due to a high number of indicators – often difficult to trace.

Therefore, it can be assumed that economic practice will involve "Orders for Sustainability Reports" which, according to the authors of this article, may be defined as: a communication strategy where companies commission drawing up sustainable development reports, organisations act as orderers and funders, introduce a requirement to highlight positive environmental, social and economic results while minimising or simplifying negative aspects, challenges or irregularities.

This phenomenon may lead to a distortion of the complete full image of an organisation, promoting a favourable but also a superficial and unreliable image of the company. This strategy may result from the desire to protect reputation, restricted communication or normative requirements, whereas it effectively nears the mechanisms of 'greenwashing' through inaccurate presentation of data and distortion of social perception, which makes it difficult to objectively assess the factual condition of the company's activities. Table 1 presents the differences in the definition of both terms divided into characteristics proposed by authors.

Table 1. *Greenwashing vs sustainability contract*

Feature	**Greenwashing**	**Sustainability contract**
Intent behind the action	Wilful cheating and misleading (Vrinda et al, 2024).	It may be unintentional, due to pressures, standards or limitations.
Nature of the actions	Manipulation, forgery, concealing the factual condition (Hassan, 2024).	Selective, single-sided presentation of information.
Aim	Factual misinformation and creating a fake image (Noori, 2024).	Presentation of positives, often without deliberate deception.
Effect for the recipient	Violation of trust, loss of transparency (Singh, 2024).	A faulty depiction of the situation, difficulties in an objective assessment.
Example of actions	Purposeful concealment of negative data, false declarations (Rathnapriva, 2024).	Highlighting only positive results, omitting challenges.

Source: *Own elaboration based on Vrinda et al, 2024; Hassan, 2024; Noori, 2024, Rathnapriva, 2024.*

In the light of the above considerations, it is therefore appropriate to interpret and identify the phenomenon of "Orders for Sustainability Reports" based on selected economic operators of the metal and automotive industry in Poland.

This article aims to carry out preliminary research in this field. Polish manufacturing companies involved in the design, manufacture and supply of metal products, parts and components for the automotive sector were considered as a research facility. The results show that in spite of the popularity and widespread use of concepts such as sustainable development, sustainable development reporting and sustainability indicators, they are still defined and interpreted in various manners.

Relatively, it is common for employees in production companies engaged in sustainable development to interpret the indicators shown in the ESG reports quire freely. Interestingly, they also assume that an order to draw up such a report independently or through an external company gives a positive assessment of the company.

In the event of any shortcomings, they will be "covered" by public relations or marketing departments. They may also be deliberately omitted or described in general terms in a public document presented, for instance, on a company's website. Ultimately, each such action brings positive effect, i.e., a company is perceived by its contractors as sustainable and thus often more, e.g., eco-friendly than its competitors. The following questions therefore arise: may such actions be referred to as "greenwashing" in the context of the three pillars of sustainable development? Is it therefore possible to discuss a "sustainable contract" in the surveyed group of companies?

2. Literature Review

Literature contains a number of definitions of sustainable development (SD) (WCED, 1987; Riahi *et al.,* 2024; Elkington, 1997; Robert *et al.,* 2005; Du *et al.,* 2011; Alvarado-Herrera *et al.,* 2017; Gunasekaran *et al.,* 2014; Lobo *et al.,* 2015; Mohammadhadi *et al.,* 2021; Mensah, 2019). An evolution of definitions and practices related to sustainable development, which take account of new contexts and challenges, is clearly visible now. The fundamental assumptions remain constant – meeting the needs of the living and not endangering the ability of future generations to meet their own needs (WCED, 1987).

The implementation of the concept of sustainable development poses challenges for manufacturing companies related to measuring their environmental, social and economic impact. The article (Skrzypek *et al.,* 2024) presents an analysis of the reports on sustainable development. The key component of such documents includes the indicators used to monitor and assess the effects of the activities undertaken by companies.

Depending on the economic sector, the estimates show that sustainable development reports use on average between 50 and 200 indicators. However, the lack of clear definitions and interpretations of indicators, and in some cases their descriptive and discretionary nature, may promote manipulation and the provision of false information on the sustainable development of enterprises both in the context of e.g., ecology, social responsibility, ethics, health of the employees, economics and management, etc.

This finding confirms the correctness of the thesis adopted in this article on the existence of a "Orders for Sustainability Reports" and fits the concept of so-called greenwashing.

Literature shows that a single valid definition of greenwashing does not exist (Spaniol *et al.,* 2024; Nemes *et al.,* 2022; See *et al.,* 2017). Two trends in considering and describing this concept currently exist. The first, much wider, defines greenwashing as the difference between what is reported and actually implemented by the company in the context of sustainable development in environmental, social and economic aspects (Ruiz-Blanco *et al.,* 2022).

Some authors distinguish concepts such as bluewashing, social washing, brownwashing, etc., (Wei, 2023; Wendt, 2024). In a narrower way, it is assumed that greenwashing is a marketing activity where companies present their products or services as more environmentally friendly than they actually are (Santos and Others, 2024).

In the light of both considerations, it can be assumed that any information concerning the performance of a manufacturing and service company in terms of SD, which cannot be proven, published with the intention of misleading or in order to gain competitive advantage, provides grounds for accusing the company of greenwashing.

This is a development of the definition set out in the article (Spaniol et al.), which concerned only the environmental aspect. In general terms, production companies are generally negatively affected by greenwashing. At the same time, in the context of increasing pressure on sustainable development, many companies recognise that investing in sustainable development reports gives them the right to expect a positive assessment of their activities aimed at sustainable development.

This is supported by the belief that paying for such a report should bring in an appreciation for their efforts. Such an approach may lead to greenwashing practices where real actions and results are downgraded in favour of a positive image.

The presented considerations led the authors to verify their accuracy and validity in the selected sector of the Polish economy. The obtained results are presented in subsequent parts of this Article.

3. Research Area

The automotive sector is one of the most important branches of the Polish economy, which is currently "on crossroads" (Wojciechowicz, 2025). According to the information of the Polish Central Statistical Office (CSO), only a few thousand passenger cars were manufactured in factories in Poland in March 2025, which is a half compared to the same month in the preceding year (Rzeczpospolita, 2025).

Other data for the first quarter of 2025 show an even greater decrease: less than 24 thousand motor vehicles manufactured means a reduction in their number year-to-year by as much as 70% (Rzeczpospolita, 2025). Manufacturing of heavy goods vehicles looks a little better, albeit it is also not on par. It fell by 16.9% to less than 79.4 thousand units in the first quarter of the year.

The production of buses increased by 27.8% in the first three months of 2025. (Rzeczpospolita, 2025). The above trend confirms the report of the Polish Automotive Industry Association of April 2025 (PZPM Report, 2025). According to the report, 9.1 thousand passenger cars were manufactured, i.e., 18.4 thousand units in April 2025 (-66.9% y/y) less than in April 2024 and by 1.1 thousand units (-10.8%) less than one month earlier.

Since the beginning of 2025, 33 thousand cars came out of manufacturing lines in Poland, with 74.2 thousand units (-69.2% y/y) less than in the corresponding period of the preceding year (PZPM report, 2025).

The Polish automotive industry faces the challenge of moving towards low- and zero-carbon vehicle production (Bednarz, 2024; Wojciechowicz, 2025; Rzeczpospolita, 2025). Considering the fact that approximately half of the Polish automotive industry is producing parts for motor vehicles, it may turn out that this transformation will be exceedingly difficult or even impossible to introduce (Bednarz, 2024).

Manufacturers of automotive parts indicate that the method of implementing the climate policy by the European Union is the main reason for such state of affairs (Bednarz, 2024; Wojciechowicz, 2025; Rzeczpospolita, 2025). In principle, only the possibility of developing electric motors was left as an option. The consequence of the gradual departure from combustion engines and the development of electromobility include lower demand for certain spare parts (Bednarz, 2024; Wojciechowicz, 2025; Rzeczpospolita, 2025).

Manufacturers of car components remind that the last 30 years showed a dynamic growth of the car part production sector in Poland, both in terms of first assembly and secondary market (Bednarz, 2024). Since 2035, these companies will be deprived of the first segment. Of course, the spare parts market will continue to exist, but it is going to significantly decrease (Bednarz, 2024). This top-down

revolution in the automotive industry will lead to redundancies and closure of specific enterprises.

According to The European Association of Automotive Suppliers (CLEPA) and Boston Consulting Group (BCG), the expected decline in employment in the Polish automotive industry will reach over 20% in by 2040, compared to 2020 (Bednarz, 2024; Wojciechowicz, 2025; Rzeczpospolita, 2025). This situation is particularly dangerous for Polish companies and does not fit into the concept of economic sustainable development goals.

An issue for the Polish automotive industry, which is one of the largest suppliers of parts and components for European car factories is the continuing decline in car sales across Europe and the increasing competition from Chinese and American manufacturers (Rzeczpospolita, 2025).

It is therefore crucial to develop models, methods, scenarios for the transition of the selected industry from traditional production for sustainable development and production. It is going to help to increase their competitiveness both on the Polish and global markets.

An important aspect of establishing a new sustainable governance model involves economic issues, including better, more accurate knowledge of the level and structure of their operating costs. It may turn out that the existing accounting, analysis and cost accounting systems will not be sufficient for the use of ESG reports. The new business model will have to take into account three key areas:

- 'clean' and organic production,
- the development of green industry parks,
- the creation and development of eco-socialism.

This in turn will entail high costs of reorganising production processes, adapting to sustainability requirements and moving towards a model of eco-management of the company. In view of all these requirements, the existence of a "Orders for Sustainability Reports" becomes highly realistic. Therefore, pilot studies were carried out to verify the above considerations.

The survey includes a group of companies from the western Poland, which meet the combined criteria of activity in the metal industry sector and specialize in the production of components and components for the automotive industry. Such companies operate using quality, technical and environmental standards in accordance with international and national standards such as ISO/TS 16949, ISO 9001, ISO 14001, adapting metal treatment technologies (e.g., pressing, milling, welding, bending) to the requirements of the automotive sector.

The selection of these companies and the region has been made based on:

- relatively high concentration of companies from the manufacturing sector, including in particular companies specialising in metalworking and components for the automotive industry,
- adaptation of voivodeships as intelligent specializations, among others, "innovative industry," "manufacturing of machinery and equipment," "metal processing," "advanced metal products" with special attention to the metal and automotive industry,
- close proximity to the German border (companies from border regions often cooperate with German neighbours, which makes them open to new the new technologies introduced by Industry 4.0 and 5.0, and the cooperation requires the use of such technologies).

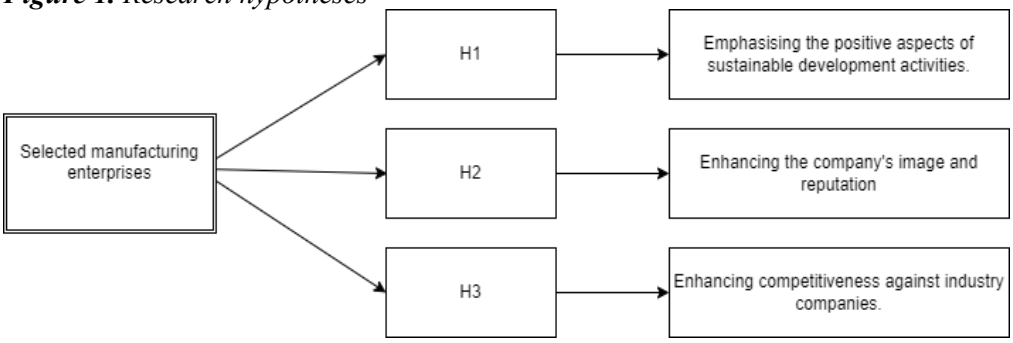
4. Research Methodology

As per above, this article aims to interpret and identify the phenomenon of "Orders for Sustainability Reports" based on the example of selected economic operators of the metal and automotive industry in Poland.

The authors defined the following research problem: do manufacturing companies operating within the automotive industry expect a positive assessment after commissioning a sustainable development report? The following hypotheses have been identified for this purpose (Figure 1):

H1: Companies commissioning sustainable development reports tend to express expectations for the presentation of results, which may result in a greater emphasis on positive aspects of sustainable development activities.
H2: The requirements for the positive results of sustainable development reports are connected with internal marketing strategies of companies which aim to improve the company's image and reputation.
H3: The percentage of companies commissioning sustainable development reports which expect positive results is higher in intensively competitive sectors where the reputation of sustainable development is a key component.

Figure 1. *Research hypotheses*



Source: *Own elaboration.*

Authors defined these hypotheses inspired the results of a survey on reporting sustainable development. The study covered 46 mid- and senior managers involved in implementing sustainable development strategies, reporting on sustainable development and CSR (Corporate Social Responsibility) in selected industries. The companies they represented due to their technology and/or processes may be classified as Industry 4.0 and 5.0. 95 companies belonging to the sectors identified and meeting the criteria of 4.0 and 5.0 were identified in western Poland.

The researched group consisted in 41% of the number of companies identified. Researchers collaborated with business environment units from the studied area of Poland in the process of identifying and contacting companies. When the survey was completed, there were answers which suggested the fictional nature of companies' intentions to meet the conditions of sustainable development.

Certain respondents questioned the validity of the contents of the reports, suggesting that audits carried out in preparation for the submission of sustainable development reports showed discrepancies between the company's strategy and the assumptions of sustainable development. In order to explore the subject, the authors of the article prepared an additional survey for 46 participants of the previous studies, which included questions concerning, among others:

- requirements and assumptions for internal and external units preparing a sustainable development report,
- methods of marketing strategies on the presentation of sustainable development results,
- methods of presenting data on sustainable development,
- methods of analysing and assessing the reliability of sustainable development reports,
- the impact of sustainability reports on the reputation of the company among contractors,
- the role of sustainable development reports in establishing a competitive advantage.

The study was carried out in the second half of 2024 and was deeper in nature. Responses were received from 45 companies (one company sent back an incomplete questionnaire). The authors of the article facilitated telephone contact for the persons who filled out the surveys.

Respondents were allowed to ask questions about ambiguities, explain doubts and made sure that the questions were correctly understood. 21 companies benefited from such option. After collecting all the surveys, the authors also phoned other companies to confirm whether the questions and answers were clear and whether everything was correctly interpreted. It was intended to increase the reliability and quality of the data obtained.

5. Research Results and Discussion

Based on the studies carried out, a general conclusion can be drawn that a balanced contract exists in a group of selected production companies. Data analysis has shown that as many as 77% of respondents raise specific expectations on how to present results in sustainable development reports (Figure 2).

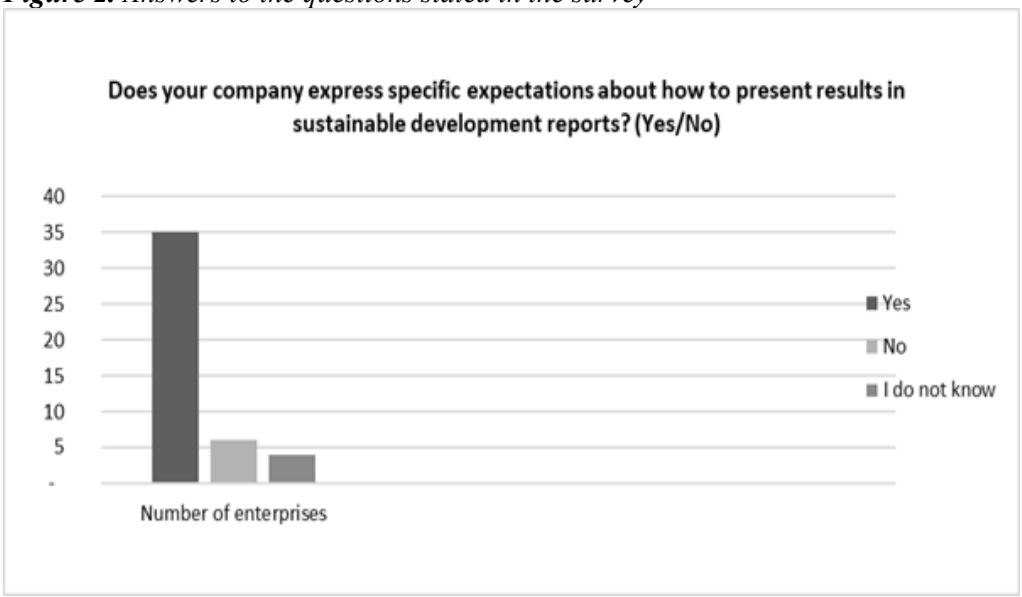
The results of the reports discussed at the level of the Management Board are regularly analysed by 75% of respondents, suggesting the importance of integrating sustainable development into the decision-making processes (Figure 3).

From the perspective of marketing strategy, as many as 91% of the participants in the survey confirm that the positive results of sustainable development have a significant impact on the perception of the company by the counterparties (Figure 4).

Marketing activities related to the promotion of sustainable development results include, in particular campaigns on company websites and social media (80% of enterprises) (Figure 5). In terms of the impact of competition on the activities undertaken, 95% of entrepreneurs monitor the activities of competition in the area of reporting and sustainable development.

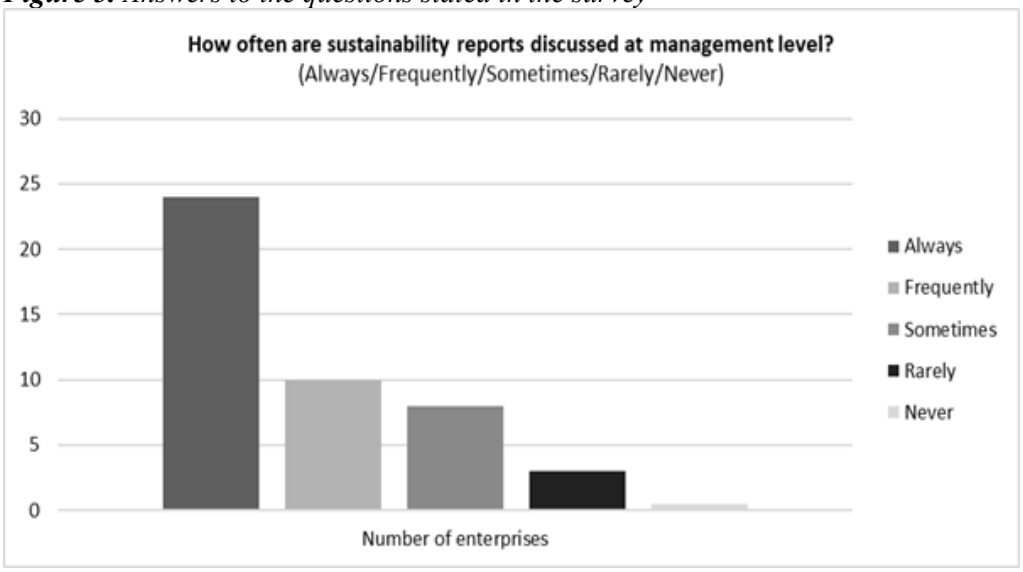
Highly competitive pressure has been identified by 88% of respondents as a key factor in decisions on investment in sustainable development.

Figure 2. *Answers to the questions stated in the survey*



Source: *Own elaboration.*

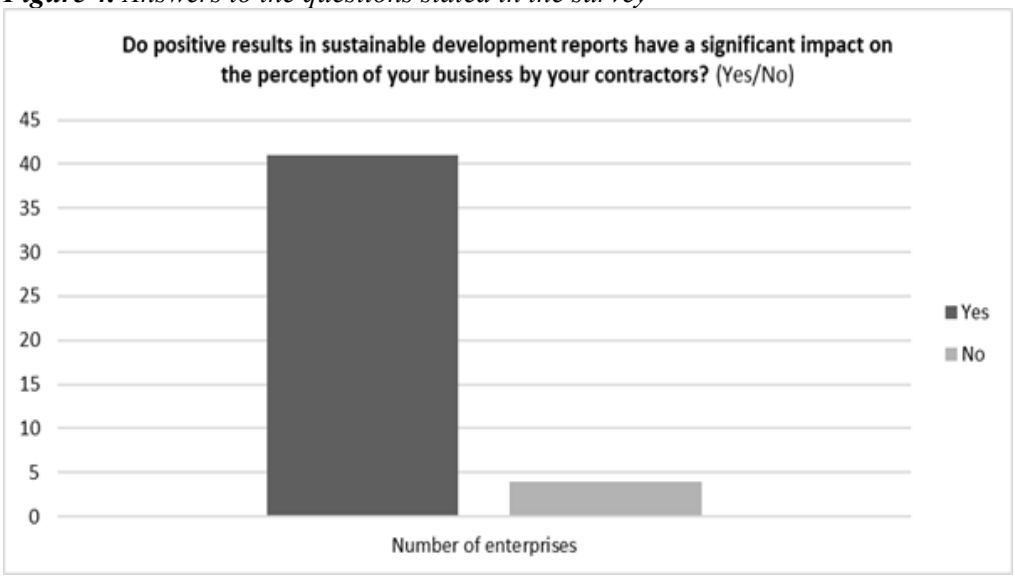
Figure 3. *Answers to the questions stated in the survey*



Source: *Own elaboration.*

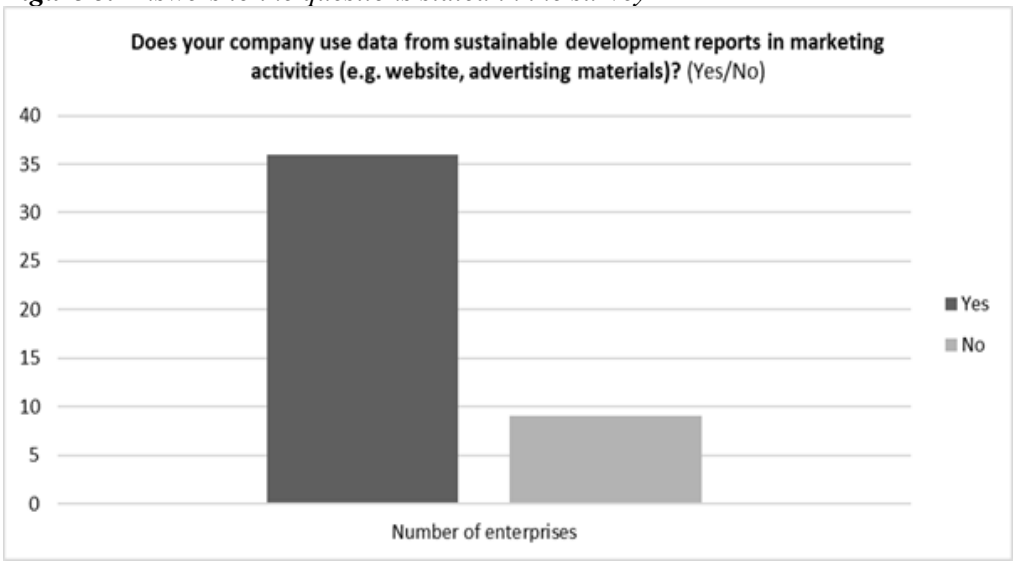
Research has shown that sustainable development is regarded by companies as an important component of the business strategy, with a strong emphasis on positive results and their presentation. The expectations of sustainable development reporting and the importance of marketing activities point towards the growing role of sustainable development in the context of market competitiveness.

Figure 4. *Answers to the questions stated in the survey*



Source: *Own elaboration.*

Figure 5. *Answers to the questions stated in the survey*



Source: *Own elaboration.*

However, there are doubts as to whether the actions taken can already be called a greenwashing practice, defined as a marketing activity where companies present their products or services as more environmentally friendly than they actually are. The discussions showed that respondents did not perceive this type of conduct as inappropriate, intentionally misleading actions of the counterparties. The authors believe that the reason for this may be the fact that production companies in Poland are only just beginning to report SD. This means that they may lack experience in countering this phenomenon.

6. Conclusions, Proposals, Recommendations

The article shows that:

- Most entrepreneurs (77%) express specific expectations for the presentation of results, suggesting an impact on the manner in which sustainability reports are shaped (confirmation for H1).
- a significant majority (80%) evaluates positive results as especially important in the context of the company's communication strategy, which points towards a link between positive performance requirements and marketing activities (confirmation for H2).
- approximately 88% of entrepreneurs feel an extraordinarily strong competitive pressure in the context of achieving positive results in the reports, which can support the link between competition and expectations of results (a confirmation for H3).

In light of the above, it may be concluded that sustainable development is increasingly perceived as a key element of business strategies, which influences the shaping of their policies and practices in the area of social responsibility and environmental care. The phenomenon of a "Orders for Sustainability Reports" appears in this context, it refers to a situation where companies, when preparing sustainable development reports, can put pressure on the authors of these reports so that the results are presented in a way which brings benefit their image.

Sustainable development reports are therefore becoming an important tool which not only document business activities for sustainable development but also serve as a means of building reputation and competitive advantage in a market where environmental and social awareness of consumers continues to grow.

The existence of such "Orders for Sustainability Reports" phenomenon may suggest that companies tend to force positive narratives, which may affect the objectivity and reliability of the results presented and thus inform the objectivity of the presented results. It is therefore appropriate to carry out further research covering a larger group of companies as well as entire Poland.

The authors of the article are currently working on developing a concept for a method and a dedicated IT tool that will use data extracted from ERP systems. This is because ERP systems are a source of objective data about the company and reflect the current situation in the entity. They also contain relatively easily accessible historical data. . Manufacturing companies from the selected industry, working with the authors of the article, have shown 100% interest in the proposed solution and declared their willingness to implement it.

It seems that such a tool will be of particular interest to small and medium-sized manufacturing companies that do not have large budgets for the development of sustainability reports by consulting companies.

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